WHAT IS CLAIMED IS:

1. An image forming apparatus comprising:

charging means for charging an image bearing member;

exposure means for exposing said image bearing member that has been charged to form an electrostatic latent image;

developing means for developing said electrostatic latent image with developer;

transferring means, to which a transferring bias under constant voltage control is applied, for transferring a developer image on the image bearing member onto other member;

test pattern forming means for forming a test pattern for image control on said image bearing member by supplying developer by said developing means to an area on said image bearing member in which charging by said charging means is effected and exposure by said exposure means is not effected;

test pattern detection means for detecting the test pattern that has been transferred to the other member by said transferring means; and

control means for setting a value of the transferring bias upon transferring of the test pattern onto the other member in accordance with a surface potential of said image bearing member

upon formation of the test pattern.

2. An image forming apparatus according to claim 1, wherein said control means sets a value of Vtr' in such a way that a potential difference between Vl and Vtr is substantially equal to a potential difference between Vd' and Vtr',

where

Vl represents a surface potential of said image bearing member that has been exposed by said exposure means upon formation of a normal image;

Vtr represents a value of the transferring bias applied to said transferring means upon transferring of the normal image;

Vd' represents a surface potential of said image bearing member that has been charged by said charging means upon formation of the test pattern; and

Vtr' represents a value of the transferring bias applied to said transferring means upon transferring of the test pattern.

3. An image forming apparatus according to claim 1, wherein a developing bias for supplying the developer is applied to said developing means, and

wherein a value of the developing bias upon

formation of a normal image is different from a value of the developing bias upon formation of the test pattern.

4. An image forming apparatus according to claim 1, wherein a value of a surface potential of said image bearing member that has been charged by said charging means upon formation of a normal image is different from a value of a surface potential of said image bearing member that has been charged by said charging means upon formation of the test pattern.

5. An image forming apparatus comprising:

charging means, to which a charging bias is applied, for charging an image bearing member;

exposure means for exposing said image bearing member that has been charged to form an electrostatic latent image;

developing means for developing said electrostatic latent image with developer;

transferring means, to which a transferring bias under constant voltage control is applied, for transferring a developer image on the image bearing member onto other member;

test pattern forming means for forming a test pattern for image control on said image bearing

member by supplying developer by said developing means to an area on said image bearing member in which charging by said charging means is effected and exposure by said exposure means is not effected;

test pattern detection means for detecting the test pattern that has been transferred to the other member by said transferring means; and

control means for setting a value of the transferring bias upon transferring of the test pattern onto the other member in accordance with a value of the charging bias applied to said charging means upon formation of the test pattern.

6. An image forming apparatus according to claim 5, wherein said control means sets a value of Vtr' in such a way that a potential difference between Vl and Vtr is substantially equal to a potential difference between Vpre' and Vtr',

where

Vl represents a surface potential of said image bearing member that has been exposed by said exposure means upon formation of a normal image;

Vtr represents a value of the transferring bias applied to said transferring means upon transferring of the normal image;

Vpre' represents the charging bias applied to

said charging means upon formation of the test pattern; and

Vtr' represents a value of the transferring bias applied to said transferring member upon transferring of the test pattern.

7. An image forming apparatus according to claim 5, wherein a developing bias for supplying the developer is applied to said developing means, and

wherein a value of the developing bias upon formation of a normal image is different from a value of the developing bias upon formation of the test pattern.

8. An image forming apparatus according to claim 5, wherein a value of the charging bias applied to said charging means upon formation of a normal image is different from a value of the charging bias applied to said charging means upon formation of the test pattern.

9. An image forming apparatus comprising:

charging means for charging an image bearing member;

exposure means for exposing said image bearing member that has been charged to form an

electrostatic latent image;

developing means, to which a developing bias is applied, for supplying said image bearing member with developer;

transferring means, to which a transferring bias under constant voltage control is applied, for transferring a developer image on the image bearing member onto other member;

test pattern forming means for forming a test pattern for image control on said image bearing member by supplying developer by said developing means to an area on said image bearing member in which charging by said charging means is effected and exposure by said exposure means is not effected;

test pattern detection means for detecting the test pattern that has been transferred to the other member by said transferring means; and

control means for setting a value of the transferring bias upon transferring of the test pattern onto the other member in accordance with a value of the developing bias upon formation of the test pattern.

10. An image forming apparatus according to claim 9, wherein said control means sets a value of Vtr' in such a way that a potential difference

between Vdc and Vtr is substantially equal to a potential difference between Vdc' and Vtr',

where

Vdc represents a value of the developing bias applied to the developing means upon formation of a normal image;

Vtr represents a value of the transferring bias applied to said transferring means upon transferring of the normal image;

Vdc' represents a value of the developing bias applied to said developing means upon formation of the test pattern; and

Vtr' represents a value of the transferring bias applied to said transferring member upon transferring of the test pattern.

11. An image forming apparatus according to claim 9, wherein a value of a surface potential of said image bearing member that has been charged by said charging means upon formation of a normal image is different from a value of a surface potential of said image bearing member that has been charged by said charging means upon formation of the test pattern.